IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the

application. An identifier indicating the status of each claim is provided.

Listing of Claims

1.   (Currently Amended) An image pick-up apparatus for picking up an

image of an object, the image pick-up apparatus comprising:

an image pick-up unit having a light receiving surface configured to receive light

from the object to carry out photo-electric conversion, and adapted to output a pixel value

obtained as the result of the photo-electric conversion;

an evaluator configured to evaluate the pixel value;

a controller configured to control, in pixel units, exposure time with respect to the

light receiving surface on the basis of the evaluation by the evaluator;

a storage unit configured to store plural pixel values output from the image pick-

up unit and the exposure times of pixels corresponding to the plural pixel values, the plural pixel

values included in a frame or a field, and an exposure time of a particular pixel may be different

than an exposure time of another pixel; and

a correcting unit configured to correct the plural pixel values stored in the storage

unit based on the exposure times stored in the storage unit[[.]],

wherein the controller is operative so that when the pixel value is a first

predetermined value or more, the controller shortens the exposure time with respect to the pixel

of the light receiving surface corresponding to that pixel value, and

wherein the controller is operative so that when the pixel value is less than a second predetermined value, the controller elongates the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value.

2.   (Previously Presented) The image pick-up apparatus as set forth in claim 1,

wherein the evaluator evaluates whether or not the pixel value is a value within a predetermined range; and

wherein when the pixel value is not a value within the predetermined range, the controller controls the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value so that the pixel value is caused to be within the predetermined range.

3-8.   (Canceled)

9.   (Previously Presented) The image pick-up apparatus as set forth in claim 1,

wherein the correcting unit is operative so that when the longest time of the plural exposure times stored in the storage unit is assumed to be $1/S_{BASE}$ and the exposure time of the pixel value stored in the storage unit is assumed to be $1/S$, the correcting unit multiplies the pixel value stored in the storage unit by S/S_{BASE} to thereby correct the pixel value.

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10.   (Previously Presented) The image pick-up apparatus as set forth in claim

1, which further comprises a display control section for displaying on a display section a picture

image in accordance with pixel values corrected at the correcting unit.

11-13. (Canceled)

14.   (Currently Amended) An image pick-up method of picking up an image

of an object, the image pick-up method comprising:

an evaluation step for evaluating a pixel value acquired from an image pick-up

section having a light receiving surface for receiving light from the object to carry out photo-

electric conversion and adapted to output the pixel value obtained as the result of the photo-

electric conversion;

a control step for controlling, in pixel units, exposure time with respect to the light

receiving surface on the basis of the evaluation result by the evaluation step;

a storage step for storing plural pixel values output from the image pick-up

section and the exposure times of pixels corresponding to the plural pixel values, the plural pixel

values included in a frame or a field, and an exposure time of a particular pixel may be different

than an exposure time of another pixel; [[and]]

a correcting step for correcting the stored plural pixel values based on the stored

exposure times[[.]]; and

a changing step of shortening the exposure time with respect to the pixel of the

light receiving surface corresponding to that pixel value when the pixel value is a first

predetermined value or more, or elongating the exposure time with respect to the pixel of the

light receiving surface corresponding to that pixel value when the pixel value is less than a

second predetermined value.

15.   (Currently Amended) A program embodied in a computer-readable

medium to control a computer to perform image pick-up processing for picking up an image of

an object, the program including:

an evaluation step for evaluating a pixel value acquired from an image pick-up

section having a light receiving surface for receiving light from the object to carry out photo-

electric conversion and adapted to output the pixel value obtained as the result of the photo-

electric conversion;

a control step for controlling, in pixel units, exposure time with respect to the light

receiving surface on the basis of the evaluation result by the evaluation step;

a storage step for storing plural pixel values output from the image pick-up

section and the exposure times of pixels corresponding to the plural pixel values, the plural pixel

values included in a frame or a field, and an exposure time of a particular pixel may be different

than an exposure time of another pixel; [[and]]

a correcting step for correcting the stored plural pixel values based on the stored

exposure times[[.]]; and

a changing step of shortening the exposure time with respect to the pixel of the

light receiving surface corresponding to that pixel value when the pixel value is a first

predetermined value or more, or elongating the exposure time with respect to the pixel of the

light receiving surface corresponding to that pixel value when the pixel value is less than a

second predetermined value.

16.   (Currently Amended) A computer-readable medium storing a program for allowing a computer to carry out image pick-up processing which picks up an image of an object, said program causing said computer to perform:

an evaluation step for evaluating a pixel value acquired from an image pick-up section having a light receiving surface for receiving light from the object and adapted to output pixel value obtained as the result of the photo-electric conversion;

a control step for controlling, in pixel units, exposure time with respect to the light receiving surface on the basis of the evaluation result by the evaluation step;

a storage step for storing plural pixel values output from the image pick-up section and the exposure times of pixels corresponding to the plural pixel values, the plural pixel values included in a frame or a field, and an exposure time of a particular pixel may be different than an exposure time of another pixel; [[and]]

a correcting step for correcting the stored plural pixel values based on the stored exposure times[[.]]; and

a changing step of shortening the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value when the pixel value is a first predetermined value or more, or elongating the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value when the pixel value is less than a second predetermined value.

17.   (Canceled)

18.   (Canceled)

19.   (Currently Amended) An image pick-up control apparatus for controlling

an image pick-up section having a light receiving surface for receiving light from an object and

adapted to output pixel values obtained as the result of the photo-electric conversion, the image

pick-up control apparatus comprising:

an evaluating section for evaluating the pixel value;

a controller for outputting, to the image pick-up section, a control signal for

controlling, in a predetermined surface unit, an exposure time with respect to the light receiving

surface on the basis of evaluation result by the evaluating section;

a storage unit configured to store plural pixel values output from the image pick-

up section and the exposure times of pixels corresponding to the plural pixel values, the plural

pixel values included in a frame or a field, and an exposure time of a particular pixel may be

different than an exposure time of another pixel; and

a correcting unit configured to correct the plural pixel values stored in the storage

unit based on the exposure times stored in the storage unit[[.]]͵

wherein the controller is operative so that when the pixel value is a first

predetermined value or more, the controller shortens the exposure time with respect to the pixel

of the light receiving surface corresponding to that pixel value, and

wherein the controller is operative so that when the pixel value is less than a

second predetermined value, the controller elongates the exposure time with respect to the pixel

of the light receiving surface corresponding to that pixel value.

20-38. (Canceled)